

CLAIMS

1. Gear drive unit (10), in particular to adjust moveable parts in a motor vehicle, with a gear housing (15) and a shaft (18) positioned therein along a longitudinal axis (30), which shaft is supported on the housing via an axial stopping face (35) on a counter stopping face (36), wherein at least one of the stopping faces (35, 36) is inclined perpendicular to the longitudinal axis (30) against a plane (42) by an angle of inclination (40) in order to generate an axial force, and a component (44), which cooperates with at least one of the stopping faces (35, 36), is arranged in a displaceable manner perpendicular to the longitudinal axis (30), characterized in that the coefficient of friction between the at least one stopping face (35, 36) and the component (44) for a movement to reduce the axial force is greater than the tangent of the angle of inclination (40).
2. Gear drive unit (10) according to Claim 1, characterized in that at least one of the stopping faces (35, 36) and/or the component (44) features a profiled surface (62), particularly a saw-tooth-like profile (62).
3. Gear drive unit (10) according to one of Claims 1 or 2, characterized in that at least one of the stopping faces (35, 36) and/or the component (44) features a stair-step-like profile (91).
4. Gear drive unit (10) according to one of Claims 1 through 3, characterized in that at least one of the stopping faces (35, 36) is embodied to be cone-shaped, in particular with annular stair steps (92).
5. Gear drive unit (10) according to one of Claims 1 through 4, characterized in that the component (44) is embodied to be one piece with the one stopping face (35, 36), in particular as a stopping element (34).
6. Gear drive unit (10) according to one of the preceding claims, characterized in that the component (44) is embodied to be U-shaped, and in particular surrounds the shaft (18) or a stopping sleeve (70) of the shaft (18).

7. Gear drive unit (10) according to one of the preceding claims, characterized in that the component (44) is an elastic ring element (94, 96), which is embodied so that it can be contracted radially.
8. Gear drive unit (10) according to one of the preceding claims, characterized in that the component (44) is embodied as a 2-step wedge.
9. Gear drive unit (10) according to one of the preceding claims, characterized in that the shaft (18) features a fore part (32) and/or at least one collar (22, 23), with which the shaft (18) is supported on the gearing housing (15) via the component (44).
10. Gear drive unit (10) according to one of the preceding claims, characterized in that the shaft (18) features a worm toothing or thread toothing (19), and engages in an inside thread (21) of a spindle drive device (10) in particular.
11. Gear drive unit (10) according to one of the preceding claims, characterized in that the component (44) can be displaced radially to the longitudinal axis (30) by means of a pre-stressed elastic element (48).
12. Gear drive unit (10) according to Claim 11, characterized in that the elastic element (48) is supported on a covering (66) of the gear housing (15).
13. Gear drive unit (10) according to one of Claims 11 or 12, characterized in that the elastic element (48) is embodied to be one piece with the component (44) or the covering (66).
14. Gear drive unit (10) according to one of Claims 11 through 13, characterized in that the component (44) is embodied together with the elastic element (48) as a wedge-shaped wavy leaf spring (45).